

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1 – 20. (Canceled)

21. (Currently Amended) A well bore servicing fluid comprising a thermally activated viscosification composition comprising an ionic water-soluble, hydrophobically modified polymer;

wherein the ionic water-soluble, hydrophobically modified polymer is: a copolymer of N-alkylacrylamides and an ionic monomer; a copolymer of stearylacrylate and acrylic acid; a terpolymer of N-isopropylacrylamide, trimethyl acrylamidopropyl ammonium iodide, and 3-dimethyl-(methacryloxyethyl) ammonium propane sulfonate; a copolymer of N-tertiarybutylacrylamide or N-isopropylacrylamide and 2-acrylamide-2-methyl propane sulfonic acid; poly(ethyleneoxide)-block-poly(propyleneoxide)-block-poly(ethyleneoxide) grafted with polysodium acrylate; hydrophobically modified poly(sodium acrylate); or copolymer of N-vinylcaprolactam and sodium acrylate; and

wherein the copolymer of N-alkylacrylamides and an ionic monomer consists of 60 to 0.1 mole percent hydrophilic monomers and 40 to 99.9 mole percent hydrophobic monomers.

22. (Original) The well bore servicing fluid of claim 21, wherein the servicing fluid comprises a cement slurry, a drilling fluid, a gravel packing fluid, a fracturing fluid, or combinations thereof.

23. (Previously Presented) The well bore servicing fluid of claim 21, wherein the water-soluble, hydrophobically modified polymer comprises a hydrophobic substituent having from about 1 to about 22 carbon atoms.

24 - 26. (Canceled)

27. (Previously Presented) The well bore servicing fluid of claim 21, wherein the servicing fluid further comprises a non-ionic surfactant.

28. (Original) The well bore servicing fluid of claim 21, wherein a viscosity of the servicing fluid is effective to suspend solids therein when the servicing fluid is in the well bore.

29. (Previously Presented) The well bore servicing fluid of claim 21, wherein the servicing fluid further comprises a downhole releasable encapsulated salt.

30. (Original) The well bore servicing fluid of claim 29, wherein the encapsulated salt comprises an ammonium salt, a sodium salt, a potassium salt, or combinations thereof.

31. (Original) The well bore servicing fluid of claim 21, wherein a viscosity of the servicing fluid is effective to suspend drill cuttings therein when the servicing fluid is pumped from the subterranean formation to near the surface of the earth.

32. (Previously Presented) The well bore servicing fluid of claim 21, wherein the thermally activated viscosification composition is capable of forming a chemically crosslinked gel, a physically crosslinked gel, or combinations thereof.

33. (Previously Presented) The well bore servicing fluid of claim 21, wherein the thermally activated viscosification composition comprises a linear polymer.

34. (Previously Presented) The well bore servicing fluid of claim 21, wherein the thermally activated viscosification composition is capable of forming a thermally reversible gel.

35. (Previously Presented) The well bore servicing fluid of claim 21, wherein an amount of the thermally activated viscosification composition present in the servicing fluid ranges from about 0.1% to about 5% by total weight of the servicing fluid.

36. (Canceled)

37. (Previously Presented) The well bore servicing fluid of claim 21, further comprising a proppant.

38 - 39. (Canceled)

40. (Previously Presented) The well bore servicing fluid of claim 27 wherein the non-ionic surfactant is an oligoethylene glycol monodecyl ether surfactant.

41. (Withdrawn) A well bore servicing fluid comprising a thermally activated viscosification compound comprising a non-ionic water-soluble, hydrophobically modified polymer, wherein the thermally activated viscosification compound is substantially free of a surfactant.

42. (Withdrawn) The well bore servicing fluid of claim 41, wherein the non-ionic water-soluble, hydrophobically modified polymer is: an alkyl hydroxyl alkylcellulose, or a hydroxypropyl methyl cellulose ethers.

43. (Withdrawn) The well bore servicing fluid of claim 42, further comprising a starch.

44. (Withdrawn) The well bore servicing fluid of claim 41, wherein the non-ionic water-soluble, hydrophobically modified polymer is: a copolymer of N-alkylacrylamide and a hydrophilic comonomer; a copolymer of N,N-dimethylacrylamide and alkoxyalkyl or alkyl acrylate; an ethyleneoxide-propyleneoxide-ethyleneoxide tri-block polymer; or a poly(ethyleneglycol-(DL-lactic acid)-ethyleneglycol) triblock copolymer.

45. (Withdrawn) The well bore servicing fluid of claim 41, further comprising a proppant.

46. (Withdrawn) The well bore servicing fluid of claim 41, wherein the water-soluble, hydrophobically modified polymer comprises a hydrophobic substituent having from about 1 to about 22 carbon atoms.

47. (Withdrawn) The well bore servicing fluid of claim 41, wherein the servicing fluid further comprises an encapsulated salt that is released down hole for reducing a temperature of the servicing fluid and thereby reducing a viscosity of the servicing fluid.
48. (Withdrawn) The well bore servicing fluid of claim 41, wherein the thermally activated viscosification compound is substantially free of a salt.
49. (Withdrawn) A well bore servicing fluid comprising a thermally activated viscosification compound comprising a non-ionic water-soluble, hydrophobically modified polymer, and an ionic surfactant.
50. (Withdrawn) The well bore servicing fluid of claim 49, wherein the non-ionic water-soluble, hydrophobically modified polymer is: an ethyl hydroxyethyl-, methyl-, hydroxypropyl-, or long alkyl group modified cellulose ether.
51. (Withdrawn) The well bore servicing fluid of claim 49, wherein the ionic surfactant is sodium dodecyl sulfate or cetyltrimethylammonium bromide.
52. (Withdrawn) The well bore servicing fluid of claim 49, further comprising a proppant.
53. (Withdrawn) The well bore servicing fluid of claim 49, wherein the water-soluble, hydrophobically modified polymer comprises a hydrophobic substituent having from about 1 to about 22 carbon atoms.
54. (Withdrawn) The well bore servicing fluid of claim 49, wherein the servicing fluid further comprises an encapsulated salt that is released down hole for reducing a temperature of the servicing fluid and thereby reducing a viscosity of the servicing fluid.
55. (Withdrawn) The well bore servicing fluid of claim 49, wherein the thermally activated viscosification compound is substantially free of a salt.

56. (Previously Presented) The well bore servicing fluid of claim 29, wherein the encapsulated salt is capable of reducing a temperature of the servicing fluid and thereby capable of reducing a viscosity of the servicing fluid.

57. (Previously Presented) The well bore servicing fluid of claim 33, wherein the linear polymer is capable of forming a physically crosslinked gel.